0066876

SAF-B00-004
Industrial Hygiene Sampling – Airborne
FINAL DATA

NO DISTRIBUTION REQUIRED

COMMENTS:

SDG 05I-3143-01 SAF-B00-004

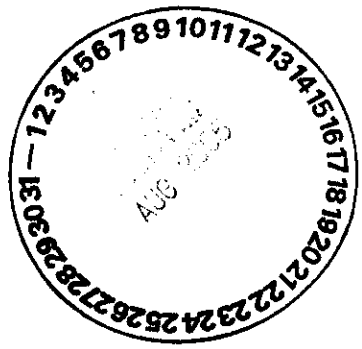
Rad only X Chem only Rad & Chem

X Complete Partial

300 Area 314 Bldg

DATA CHEM LABORATORIES

Cover Page



Report Identification Number: 05I-3143-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Henry W. Ruby / Denise A. Pitts
Laboratory Identification Number: DCHM
SAF#: B00-004;B00-005 / R300XX J452
Payroll#: 73914

Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
01 Aug 2005	J03L84	05I29688	NMAM 7300M	G057200G	MCE
01 Aug 2005	J03KM4	05I29689	NMAM 7300M	G057200G	MCE
01 Aug 2005	J03L85	05I29690	NMAM 7300M	G057200G	MCE
01 Aug 2005	J03KM8	05I29691	NMAM 7300M	G057200G	MCE

I certify that this electronic image and all hardcopies produced from this image accurately represent the data and are in compliance with the contract specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager or the Manager's designee.

Name: Lisa M. Reid
Title: Chemist
Date: August 04, 2005

DataChem Laboratories, Inc.
960 West Levoy Drive
Salt Lake City, Utah 84123-2547

Phone: (801) 266-7700
FAX: (801) 268-9992

Web Page: www.datachem.com
E-mail: lab@datachem.com

Case Narrative Page

Report Identification Number:	05I-3143-01
Subcontract Number:	0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist:	Henry W. Ruby / Denise A. Pitts
Laboratory Identification Number:	DCHM
SAF#:	B00-004;B00-005 / R300XX J452
Payroll#:	73914

General Set Information: There are nine samples in set 05I-3140-01 and four samples in set 05I-3143-01 for a total of 13 samples. The samples were analyzed for beryllium on MCE filter. No problems were encountered with the receipt of these samples and no contact with the CTR was required.

Method Summary: Samples were transferred to 50 ml centrifuge tubes and digested in the presence of 10 mL of 1:1 (v/v) nitric acid. Samples were digested in a hot block set at 110°C (with a thermometer reading of 99°C) for 40 minutes. Samples were then diluted to a 25 mL volume with ASTM Type II Water. Samples were shaken and delivered for ICP analysis.

Sample Preparation: All samples were prepared in accordance with DCL SOP "IH-AN-021" and NIOSH method NMAM 7300 modified for hot block digestion.

Holding Times: The holding times were met for both sample preparation and analysis.

Instrument Calibration: Instrument calibration was performed in accordance with NIOSH method NMAM 7300.

Initial and Continuing Calibration Verification Analysis: Beryllium recoveries in all Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) samples are within the quality control limits of ± 10%.

Initial and Continuing Calibration Blank Analysis: No beryllium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.02 ug/sample.

Method Blank Analysis: No beryllium was found in the media blank sample above the Contract Required Detection Limit (CRDL).

Dilution(s): None of the samples were diluted.

Laboratory Control Sample and Duplicate Analysis: One Laboratory Control Sample (LCS) and one Laboratory Control Sample Duplicate (LCSD) were prepared and analyzed with the sample batch. The LCS result was within the control limit of ± 20%. The Relative Percent Difference (RPD) between the LCS and the LCSD was within the control limit of 20%.

Case Narrative Page

Replicate Analysis: Two samples in this batch were replicated. The RPDs between the samples and the replicates were within the control limit of 20%. If the result of the sample or replicate is below the CRDL, replicate analysis is negligible.

Flagging Codes:

U - Analyte not detected above the Method Detection Limit (MDL) of 0.004 ug/sample.
J - Analyte result is reported above the Method Detection Limit (MDL) of 0.004 ug/sample, but below the Contract Required Detection Limit (CRDL) of 0.02 ug/sample.

Nonconformance/Corrective Action Report (NC/CAR): N/A

Sample Calculation: The final results are calculated by the following equation:

Final result for aqueous samples (µg/sample) = (A) x (B) x (C)

Where:
A = Analyte concentration from instrument determination (µg/L)
B = Concentration factor from sample preparation
= Final Volume of Digestate (L) / Sample
C = Dilution performed at time of analysis

Example Calculation: (1 µg/L) x (0.025 L/sample) x (1) = 0.025 µg/sample

Miscellaneous Comments: None.

DataChem Laboratories, Inc.
960 West Levoy Drive
Salt Lake City, Utah 84123-2547
Phone: (801) 266-7700
FAX: (801) 268-9992
Web Page: www.datachem.com
E-mail: lab@datachem.com

Report Page

Report Identification Number: 05I-3143-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Henry W. Ruby / Denise A. Pitts
Laboratory Identification Number: DCHM
SAF#: B00-004;B00-005 / R300XX J452
Payroll#: 73914

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Beryllium µg/sample		Beryllium µg/m³		Air Volume L	
J03L84	05I29688	03 Aug 2005	<0.02	U	<0.06	U	72.	
J03KM4	05I29689	03 Aug 2005	<0.02	U	<0.04	U	100.	
J03L85	05I29690	03 Aug 2005	<0.02	U	<0.03	U	132.	
J03KM8	05I29691	03 Aug 2005	0.008	J	**		0.	
Limit of Detection (LOD)			0.004					
Required Detection Limit (RDL)			0.02					

U - Parameter not detected above LOD.
J - Parameter between LOD and RDL.

DataChem Laboratories, Inc.
960 West Levoy Drive
Salt Lake City, Utah 84123-2547

Phone: (801) 266-7700
FAX: (801) 268-9992

Web Page: www.datachem.com
E-mail: lab@datachem.com

QC Summary Page

Report Identification Number: 05I-3143-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Henry W. Ruby / Denise A. Pitts
Laboratory Identification Number: DCHM
SAF: B00-004;B00-005 / R300XX J452
Payroll#: 73914

Batch ID: G057200G

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
BL-234546-1	MB	Beryllium	µg/sample	0.004	NA	NA	NA	NA
QC-234546-1	LCS	Beryllium	µg/sample	10.6	NA	10.0	106.	NA
QD-234546-1	LCSD	Beryllium	µg/sample	10.4	10.6	10.0	104.	2.11

MB - Method Blank
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MSD - Matrix Spike Duplicate
LD - Laboratory Duplicate

NA - Not Applicable
ND - Parameter not detected above LOD

LCS, LCSD Percent Rec. = (Result / Target) * 100.0
MS, MSD Percent Rec. = ((Result – Parent) / Target) * 100.0

LCS, LCSD Relative Percent Diff. = ((|LCS – LCSD|) / ((LCS + LCSD)/2.0)) * 100.
MS, MSD Relative Percent Diff. = ((|MS – MSD|) / ((MS+ MSD)/2.0)) * 100.
LD Relative Percent Diff. = ((|Parent – LD|) / ((Parent + LD)/2.0)) * 100

DATA CHEM LABORATORIES

COC Page

3143
5I-313701

Bechtel Hanford, Inc.

ERC/INDUSTRIAL HYGIENE CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector: Joe Pearson	Company Contact: Henry W. Ruby and Denise A. Pitts	Telephone No. 373-5600	Project Coordinator: Joan H. Kessner	Data Turnaround: 24 hrs
Payroll #: 73914	Sampling Location: 300 A 314 Bldg	SPECIAL INSTRUCTIONS: All relevant COAs must be provided: ~~R 300-00 1302~~ R31400 1300	SAF No. B00-004; B00-005	
Type of Sample: Be Airborne		ANALYSIS METHOD (SPECIFIC): Niosh 7300 Be	Method of Shipment: FEDEX	
Shipped To: Datachem Saltlake City			Bill of Lading/Air Bill No. 8525 3372 0006	

POSSIBLE SAMPLE HAZARD/REMARKS	MATRIX	Preservation (i.e., cooling required, etc.)			
Be	(A) - AIR, WI - WIPE, X - OTHER		No	No	No
Special Handling and/or Storage: NA					

SAMPLE ANALYSIS

SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L)	Comments	Asbestos Airborne	Lead Airborne	Be Airborne		
J03CJ4	A	8-1-05	72 ~~71.5~~ 8/2/05	NA			X	05I1968	05I1968
J03KM4	A	8-1-05	100	NA			X	84	84
J03CJ5	A	8-1-05	132 ~~54~~ 8/2/05	NA			X	90	90
J03KM8	A	8-1-05	0	Blank			X	91	91

JP 8-1-05

BHI-SH-202 (07/28/2004)

Page 1 of 2

From: unknown Page: 2/6 Date: 8/2/2005 4:47:18 PM

ERC/INDUSTRIAL HYGIENE CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SIGN / PRINT NAMES / USE MILITARY TIME

Relinquished By/Stored:	DATE / TIME	Relinquished By/Stored:	DATE / TIME
Joe Pearson [signature]	8-1-05 1440	Lock Drawer Rm 16 Bldg 3746	8-1-05 1440
Lock Drawer RM.16 Bldg. 3746 E. Harries [signature]	8/2/05 1445	SWALE [signature]	8205 1445
SWALE [signature] ERC	8205 1510	FEDEX	
Fed Ex		[signature]	3Aug05/1000
Metals WC	3Aug05/1015		

LABORATORY SECTION	Received By	Title	DATE / TIME
	[signature]		3Aug05/1000

REVIEWED BY: ______________________ DATE: ______________

PRINT/SIGN NAME

BHI-SH-202 (07/28/2004)

DataChem Laboratories, Inc.
960 West Levoy Drive
Salt Lake City, Utah 84123-2547
Phone: (801) 266-7700
FAX: (801) 268-9992
Web Page: www.datachem.com
E-mail: lab@datachem.com